

In the Claims:

Please cancel claim 9.

Please amend claim 1 as follows:

1. (Amended) A method for evaluating a test compound's ability to ~~modulate~~ inhibit prolyl-4-hydroxylase (P4H), comprising the steps of:

(a) introducing a test compound into a test chimeric *Caenorhabditis elegans*, a P4H-gene modified *Caenorhabditis elegans*, or a wild-type *Caenorhabditis elegans*, wherein the test chimeric *Caenorhabditis elegans* comprises a P4H gene that complements an endogenous P4H gene mutation, wherein the mutation results in an endogenous P4H that is not functional, and

(b) observing the effect of the test compound on the prolyl 4-hydroxylase activity of the progeny of the test nematode, P4H-gene modified nematode or the wild-type nematode and determining that the effect of the test compound is due to its effect on prolyl-4-hydroxylase activity, wherein a dpy or embryonic lethal phenotype indicates prolyl-4-hydroxylase inhibition.

2. (Original) The method of claim 1, wherein the test compound is a chemical.

3. (Previously Amended) The method of claim 1, wherein the test compound is a protein or peptide.

4. (Original) The method of claim 1, wherein the introduction of the test compound involves placing the nematode in a solution containing the test compound.

5. (Original) The method of claim 1, wherein the test compound is introduced into a wild-type nematode and the observation of dpy or embryonic lethal phenotype indicates nematode prolyl 4-hydroxylase inhibition.

6. (Original) The method of claim 1, wherein the test compound is introduced into a P4H-gene modified nematode and the observation of a dpy or embryonic lethal phenotype indicates P4H inhibition.

7. (Original) The method of claim 1, wherein the introduction of a test compound is into a test chimeric nematode and the observation of dpy or embryonic lethal phenotype indicates non-native prolyl 4-hydroxylase inhibition.

8. (Previously Amended) The method of claim 1, wherein the test chimeric nematode is a *C. elegans* and harbors a dpy-18 mutation.

9. (Cancelled) The method of claim 1, wherein the observation of a dpy phenotype indicates that the test compound modulates the P4H gene found on chromosome III.

10. (Cancelled)

11. (Cancelled)

12. (Amended) A method for evaluating a test compound's ability to modulate prolyl 4-hydroxylase, comprising the step of:

(a) introducing a test compound into a *Caenorhabditis elegans* comprising a dpy-18 or ph-1 mutation phenotype, and

(b) observing the effect of the test compound on ~~the prolyl 4-hydroxylase activity of~~ the progeny of the *Caenorhabditis elegans* and determining that the effect of the test compound is due to its effect on prolyl-4-hydroxylase activity, wherein the rescue of the

dpy-18 or phy-1 phenotype indicates an increased level of prolyl-4-hydroxylase activity.

13. (Cancelled)

14. (Cancelled)

15. (Original) The method of claim 1 wherein the test compound is part of a combinatorial chemical library.

16. (Original) The method of claim 12 wherein the test compound is part of a combinatorial library.

17. (Amended) A method for evaluating a test compound's ability to modulate inhibit P4H, comprising the steps of:

(a) introducing a test compound into a test chimeric *Caenorhabditis elegans*, a P4H-gene modified *Caenorhabditis elegans*, or a wild-type *Caenorhabditis elegans*, wherein the test chimeric *Caenorhabditis elegans* has a complemented P4H gene mutation and wherein the mutation results in a non-functional endogenous P4H, and

(b) measuring the level of P4H activity of the progeny of the test *Caenorhabditis elegans*, P4H gene modified *Caenorhabditis elegans* or wild-type *Caenorhabditis elegans* and determining that the effect of the test compound is due to its effect on prolyl-4-hydroxylase activity, wherein a lower P4H activity compared to untested control *Caenorhabditis elegans* indicates that the test compound is an inhibitor of P4H.

18. (Original) The method of claim 17 wherein the measurement of P4H activity is via a ratio of P4H to proline.

19. (Cancelled)

20. (Cancelled)

21. (Original) The method of claim 17 wherein the test compound is part of a combinatorial library.